

Nutrition Risk Screening

Section 2

Why Screen?

Although statistics tell us that adolescents as a group have poor eating habits and therefore are at risk for poor nutrition, it's important to screen each client to determine individual eating habits and the factors that affect that client's choices.

The nutrition education provided should be based on what the individual client needs to know. The client action plans that are developed should include changes in behavior that the client can realistically and reasonably make, and is willing and ready to make.

Using the Questionnaire

The “Nutrition Risk Screening Questionnaire” may be used to identify your adolescent client’s nutrition concerns and her potential risk for poor nutrition. The questions asked address eating behaviors, food choices, food resources, weight and body image, physical activity, and the client’s readiness for making changes in these areas.

The questionnaire should not be given to the client to fill out, but rather should serve as an interview tool to facilitate discussion between the client and the case manager. It can be administered

all at one time; however, it may be more effective to use the separate parts at different times.

It is important to do Part I of the Questionnaire first, as this should reveal the client's usual dietary intake and other eating behaviors.

The sequence for using the remaining parts should be based on individual client need. For example, if you suspect that your client may have an eating disorder, you may want to screen for that right away.

Interpreting the Questionnaire

PART 1. DIETARY INTAKE

A. HABITS

Skipped meals

Frequently missed meals can result in the inadequate intake of calories and nutrients or can lead to over-eating at other meals and snacks. Explore with the client reasons for skipped meals. See Section 8: *Weight Management* guideline for healthy snack ideas and tips for healthy eating behavior.

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NUTRITION RISK SCREENING

Water

An adolescent should drink six to eight 8-oz glasses of fluid per day with more before and after physical activity. Sodas, coffee, tea and juice count as fluid intake; however, they can be a source of extra calories contributing to weight gain and/or caffeine, which causes the body to lose fluid.

Convenience/fast food

Convenience and fast foods are popular and easily available. Frequent consumption increases fat, calorie, and salt intake and reduces the intake of fiber and some vitamins and minerals. Use the “Fast Food Survival Guide” booklet to discuss options for healthier food choices. (This booklet has been provided to Adolescent Family Life Program case management staff by the state Maternal and Child Health Branch.)

Vegetarian diets

Because the term “vegetarian” is often used loosely, refer to Section IO: *Vegetarian Teens* guideline for additional screening questions for clients who say they are vegetarian.

Vitamin/mineral/herbal supplements

Vitamin and mineral supplements, although helpful in some instances, cannot take the place of a healthy diet. If the client insists on taking supplements, emphasize the need to avoid high doses that can be toxic. Herbal supplements are not regulated by the Food and Drug Administration and have not been satisfactorily researched to determine their safe use for adolescents.

Protein powders, creatine

Contrary to popular belief, increased protein intake does not affect muscle size. The effect of creatine on the growing adolescent body is unknown.

Special diets

Clients on special diets for medical reasons, such as diabetes, should have been instructed by a registered dietitian or other medical care provider and should be receiving ongoing monitoring of medical condition and diet.



B. FOOD GROUPS

Criteria for meeting recommended number of servings from the Food Guide Pyramid and suggested guidelines for further screening and intervention activities follow each of the food group intake grids.

Bread, cereal, rice, and pasta

Grains provide complex carbohydrates (an important source of energy), protein, and minerals; they also tend to be low in fat. Whole grains are a good source of fiber.

Fruits and vegetables

Fruits are important sources of vitamins and fiber and are low in fat. Vegetables provide vitamins, such as A and C, and minerals, such as calcium and iron. Most are low in fat and high in fiber.

Milk, yogurt, and cheese

Milk, yogurt, and cheese are good sources of calcium and provide protein, vitamins, and minerals. Encourage the client to use nonfat or low-fat milk and other low-fat dairy products.

Meat, poultry, fish, dry beans, eggs, and nuts

Red meat, poultry, fish, eggs, and dried beans provide protein, iron, zinc, and many other minerals and vitamins. Cold cuts, bacon, sausage, and fried items are high in fat and calories.

Fats, oils, and sweets

This group includes butter, margarine, mayonnaise, vegetable oil, gravy, salad dressing, cake/cupcakes, pie, cookies, chips, doughnuts, and candy. There is no recommended serving because these foods provide little nutrition but can be a source of too many calories.

PART 2. FOOD SECURITY

Encourage client to use available resources. Refer to food assistance and nutrition programs, such as WIC, if client is eligible.

PART 3. FOOD SHOPPING AND PREPARATION

If appropriate, share recipe booklet with client or other person responsible for the family's meals. (This booklet has been provided to Adolescent Family Life Program case management staff by the state Maternal and Child Health Branch.)

PART 4. DISORDERED EATING AND WEIGHT

Many adolescents may be dissatisfied with their weight and use unhealthy methods to alter it. Use Section 7: *Body Image and Disordered Eating* and Section 8: *Weight Management* guidelines for further screening and intervention activities.

PART 5. PHYSICAL ACTIVITY

The Surgeon General's report on physical activity and health recommends 30 minutes or more of moderately intensive physical activity all or most days of the week. Help the inactive adolescent identify enjoyable activities that can be included into a daily routine. Excessive physical activity (too often and/or too intense) may be a sign of an eating disorder.

Too much @e watching television and videotapes or playing computer games can lead to overweight. Sedentary activities should be limited to one to two hours per day.

Use Section 9: *Physical Activity* guideline for further screening and intervention activities.



PART 6. CLIENT AWARENESS AND READINESS FOR CHANGE

It is important to identify how ready, if at all, the client is to make changes in behavior that will improve nutrition and physical activity. See Appendix Two for information on the signs of change.

Interventions/Referrals

Each of the guidelines provides definition and background information on a specific topic, additional screening questions or self-assessment activities, suggestions for intervention activities and criteria for referral. Activity worksheets are provided for the case manager to use with the client to assist with self-assessment and setting goals for behavior change.

For additional information on providing nutrition counseling to adolescents, see Appendix Two, "Stages of Change," and Appendix Four, "Strategies for Health Professionals to Promote Healthy Eating Habits."

Follow-Up

Ask the client to complete the food diary (included in this section) periodically (for example, every three months) in order to:

1. recognize and praise positive behavior
2. identify any need for further education/counseling.

NUTRITION RISK SCREENING QUESTIONNAIRE

This Nutrition Risk Screening Questionnaire is intended to identify nonpregnant, nonlactating adolescents at risk for calorie, vitamin, mineral, and fiber deficiency; excess fat and sugar intake; inadequate or excessive physical activity; and problematic weight control behaviors or attitudes. Pregnant adolescents are at high risk nutritionally; their dietary intake and physical activity should be assessed by a registered dietitian, nurse, or physician specializing in obstetrical care.

PART 1. DIETARY INTAKE

A. HABITS

For each question, circle the answer which best describes the client’s usual behavior.

1. How many days each week do you eat breakfast?	None	1-2 days	3-5 days	6-7 days
2. How many days each week do you eat lunch?	None	1-2 days	3-5 days	6-7 days
3. How many days each week do you eat dinner?	None	1-2 days	3-5 days	6-7 days
4. How often do you eat between meals or after dinner?	Daily	Several times /week	Once/week or less	Rarely
5. How much water do you drink each day?	<1 cup	1-2 cups	3-5 cups	>5 cups
6. How many times per week do you eat or take out a meal from a fast food restaurant?	Daily	Several times/week	Once/week or less	Rarely
7. Are you a vegetarian?	Yes	No		
8. Do you take any vitamin or mineral supplement?	Daily	Weekly	Rarely	Never
If yes, which brand or type: _____				
9. Do you use herbal supplements?	Daily	Weekly	Rarely	Never
If yes, which one(s)? _____				
10. Do you use any pills or teas to lose weight?	Yes	No		
11. Do you use protein powders, creatine or other supplements that claim to increase muscles?	Daily	Weekly	Rarely	Never
12. Are you on a special diet for medical reasons?	Yes	No		

B. Food Groups

Using food replicas from the Food Guide Pyramid, help the client determine the number of servings eaten from the following food groups.

Bread, Cereal, Rice, and Pasta

Serving Size	Food Item	Servings per day	Servings per week	Eat once a month or less	Never eat
1 slice	Bread				
1/2	Hamburger or hot dog bun				
1/2	English muffin, bagel, pita bread				
4-6	Crackers				
1-6 inch	Tortilla				
1 small or 1/2 large	Muffin, *biscuit				
2 medium	Pancakes				
2 small	Waffle				
1/2 cup	Hot cereal				
3/4 cup	Cold Cereal				
1/2 cup	Rice, cooked				
1/2 cup	Pasta (spaghetti, noodles, macaroni, etc.), cooked				
	TOTAL # OF SERVINGS:				

*risk of excessive calories due to high fat content

- ☐ Client meets recommendation of 6-11 servings/day of bread, cereal, rice, and pasta
- ☐ < 6 servings/day: Client is at risk for low calorie/fiber/carbohydrate intake and extreme dieting behavior depending on intake from other groups. Use Section 7: body Image and Disordered Eating guideline for further screening and intervention.
- ☐ > 11 servings/day: Client may be at risk for excessive calorie intake depending on intake from other food groups. Use Section 8: Weight Management guideline for further screening and intervention.

NUTRITION RISK SCREENING

Fruits and Vegetables

Serving Size	Food Item	Servings per day	Servings per week	Eat once a month or less	Never eat
1 medium	Fresh apple, pear, banana, orange, peach, nectarine, tomato				
1/2	Grapefruit				
2	Apricots, tangerines				
1/4	Cantaloupe				
1 cup	Melon, cut up				
3/4 cup	Berries				
1/2 cup	Pineapple, fresh				
1/2 cup	Canned or frozen fruit				
1/4 cup	Dried fruit (raisins, apricots, dates)				
3/4 cup	100% fruit or vegetable juice				
1 cup	Leafy green vegetables				
1/2 cup	Vegetables, raw or cooked				
1 medium	Potato, baked, boiled, or mashed				
10-12 (1/2 small fast food order)	French fries*				
TOTAL # OF SERVINGS:					

*risk of excessive calories due to high fat content

- ☐ Client meets recommendation of 5 or more servings/day of fruits and vegetables.
- ☐ < 5 servings/day: Client is at risk for low vitamin/mineral/fiber intake. Use Section 5: Folate and Section 6: Fruits and Vegetables guidelines for further screening and intervention.

Milk, Yogurt, and Cheese

Serving Size	Food Item	Servings per day	Servings per week	Eat once a month or less	Never eat
1 cup	Milk*				
1 cup	Chocolate milk				
1 cup	Yogurt				
1-2 ounces	Cheese*				
1 cup	Cottage cheese*				
1½ cup	Frozen yogurt				
1½ cup	Ice cream*				
1½ cup	Pudding,* custard				
8 ounces	Milk shake*				
	TOTAL # OF SERVINGS:				

*risk of excessive calories due to high fat content

- ☐ Client meets recommendation of 3 or more servings/day of dairy products
- ☐ < 3 servings/day: Client is at risk for low calcium and protein intake. Use Section 3: Calcium and Section 10: Vegetarian Teens guidelines for further screening and intervention.

NUTRITION RISK SCREENING

Meat, Poultry, Fish, Dry Beans, Eggs, and Nuts

Serving Size	Food Item	Servings per day	Servings per week	Eat once a month or less	Never eat
3 ounces	Cooked beef, pork or lamb				
3 ounces	Cooked chicken, turkey or duck				
3 ounces	Fresh or frozen fish, cooked				
3 ounces	Shellfish				
3 ounces	Lunch meats*				
	Hot dogs*				
3 ounces	Tuna or other canned fish				
3	Eggs (1 egg = 1 oz. meat)				
9 ounces	Tofu (3 ounces = 1 oz. meat)				
6 Tbsp	Peanut butter*				
1½ cup	Legumes, cooked or canned: [lentils, beans (pinto, navy, kidney, garbanzo), split peas, black-eyed peas]				
	Nuts and seeds				
	TOTAL # OF SERVINGS:				

*risk of excessive calories due to high fat content; low-fat choices recommended

- ☐ Client meets recommendation of 2-3 servings/day of protein foods.
- ☐ < 2 servings/day: Client is at risk for low protein and iron intake. Use Section 4: Iron and Section 10: Vegetarian Teens guidelines for further screening and intervention.

Fats, Oils, and Sweets

Serving Size	Food Item	Servings per day	Servings per week	Eat once a month or less	Never eat
2	Cookies				
1	Brownie				
1	Donut or sweet roll				
1	Granola bar				
1	slice cake or pie				
½ cup	Pudding, custard, Jello, ice cream, sherbet				
1	Chocolate bar, M&Ms or candy (1 pkg)				
1 tbsp	Sugar, honey, jam, jelly, syrup				
12 ounces	Soda (not diet) (1 can)				
1 cup	Fruit flavored, sugar sweetened drinks (lemonade, fruit punch, KoolAid, Hi-C, Sunny Delight)				
1 tsp	Butter or margarine				
1 Tbsp	Mayo, salad dressing, sour cream				
1 Tbsp	Cream cheese				
1 Tbsp	Vegetable oil				
	TOTAL # OF SERVINGS:				

- ☐ > 3 servings/day: Client is at risk for excessive fat, sugar and calories. Use Section 8: Weight Management guideline for intervention activities.

PART 2. FOOD SECURITY

For each question, circle the answer which best describes the client’s usual behavior.

1.

Do you use any of the following food resources

...food stamps

Yes

No

...WIC

Yes

No

...donated food/meals/food closet

Yes

No

...school meals

Yes

No
2.

Are there times when there is not enough food to eat or not enough money or food stamps to buy food?

Rarely

Occasionally

Monthly

Weekly

PART 3. FOOD SHOPPING AND PREPARATION

For each question, circle the answer which best describes the client's usual behavior.

1. Who buys the food that you and your family eat?
 I do My parent(s) My spouse or partner Other: _____
 If not you, is the person who does open to suggestions and education? Yes No
2. Is a shopping list used? Yes No Sometimes
3. Do you plan any of the meals that you and your family eat?
 Rarely For myself only Sometimes All the time
4. Who prepares the meals that you and your family eat?
 I do My parent(s) My spouse or partner Other: _____
 If not you, is the person who does open to suggestions and education? Yes No
5. How is meat, poultry and fish usually prepared at home?
 Fried Baked Broiled Other: _____
6. What type of fruits and vegetables are used at home?
 Fresh Frozen Canned
7. How are vegetables usually prepared?
 Eaten raw Steamed or cooked in microwave oven Boiled in water Other: _____
8. Where you live, do you have...
 ...a working stove? Yes No
 ...a working stove? Yes No
 ...a working refrigerator? Yes No
 ...a working microwave oven? Yes No
 ...other equipment you need for preparing and cooking food? Yes No
 ...enough space for food preparation? Yes No

PART 4. BODY IMAGE, DISORDERED EATING, AND WEIGHT MANAGEMENT

1.	Do you worry about gaining weight?	Yes	No
2.	Are you preoccupied with losing weight?	Yes	No
3.	Are you on a diet or do you limit your food intake to lose weight?	Yes	No
4.	Does your mood depend on your weight (e.g., if you gain one pound you are depressed, irritable, etc.)	Yes	No
5.	Do you feel bad about yourself if you gain weight?	Yes	No
6.	If you gain one pound, do you worry that you will continue to gain weight?	Yes	No
7.	Do you think of certain foods as being either “good” or “bad” and feel guilty about eating “bad” foods?	Yes	No
8.	Do you use foods to comfort yourself?	Yes	No
9.	Do you ever feel out of control when eating?	Yes	No
10.	Do you spend a significant amount of time thinking about food and when you will eat?	Yes	No
11.	Do you vomit or have you thought about vomiting as a way to control your weight?	Yes	No
12.	Do you try to hide how much you eat?	Yes	No
13.	Do you use laxatives, water pills, exercise, etc., to prevent weight gain?	Yes	No
14.	Are you dissatisfied with your body size or shape?	Yes	No
15.	Do you eat until you feel stuffed?	Yes	No

Total number of “yes” answers = _____

More than five (5) “yes” answers may indicate an eating disorder. See Section 7: *Body Image and Disordered Eating* and Section 8: *Weight Management* guidelines for further screening and intervention activities.

PART 5. PHYSICAL ACTIVITY

For each question, circle the answer which best describes the client's usual behavior.

1. On how many of the past seven days did you participate
in moderate physical activity (for example, walking
or riding a bike) for at least 30 minutes? 0-1 2-3 4-5 6-7
 2. On how many of the past seven days did you participate
in vigorous physical activity (for example, basketball,
fast dancing or swimming) for at least 20 minutes? 0-1 2-3 4-5 6-7
 3. Do you spend more than two hours per day watching
television and videotapes or playing computer games? Yes No
- ☐ Client meets recommendation of at least 30 minutes of moderate or 20 minutes of vigorous physical activity per day
4 or more days per week.
- ☐ Client does not meet minimum physical activity recommendation. Use Section 9: *Physical Activity* guideline for
further screening and intervention activities.

PART 6. CLIENT AWARENESS AND READINESS FOR CHANGE

Identify your client’s stage of behavior change and readiness to change.

1.	How would you rate your eating behaviors?	Good	Need to improve a little	Need to improve a lot
2.	Are you interested in changing your eating behaviors?		Yes	No
3.	Are you thinking about changing your eating behaviors?		Yes	No
4.	Are you ready to change your eating behavior?		Yes	No
5.	Are in the process of changing your eating-behavior?		Yes	No
6.	Are you trying to maintain changes in your eating behaviors?		Yes	No
7.	What changes would you like to modify or maintain?	a. _____		
		b. _____		
		c. _____		
8.	What do you need to help you make or maintain desired changes?			
		Information? _____		
		Assistance? _____		
		Other? _____		

- ☐ Client is in early stages of behavior change or unwilling to change.
- ☐ Client is ready to change eating behaviors. Use action plans in guidelines to assist client with setting of realistic and achievable goals for behavior change.

NUTRITION NEEDS ASSESSMENT WORKSHEET

Client name and I.D.# _____
(Possible Nutrituion Risks on back)

Date	Identified Nutrition Risk	Intervention Planned – Activities and Referrals	Outcome

Comments: _____

Case Manager signature: _____ Date: _____

NUTRITION RISK SCREENING

Nutrition risks that may be identified with the “Nutrition Risk Screening Questionnaire”

Low intake of...

- ☐ calories
- ☐ carbohydrates
- ☐ protein
- ☐ iron
- ☐ calcium
- ☐ fruit vegetables
- ☐ folate/folic acid
- ☐ water

Too much...

- ☐ fat, sugar, and calories
- ☐ fast foods/convenience foods

Physical Activity

- ☐ not enough
- ☐ excessive

Weight

- ☐ body dissatisfaction
- ☐ disordered eating behavior
- ☐ extreme dieting behavior

Lack of...

- ☐ food shopping/preparation skills
- ☐ food storage/preparation equipment

Other

- ☐ food security
- ☐ vegetarian diet
- ☐ use of supplements

Food Diary for: _____ **Date:** _____

List how much you eat, drink or take as a supplement for every day next week. Include amounts to the best of your knowledge, for example, 1 bowl of cereal with 1/2 cup milk, 1/2 apple, 2 slices of pizza, 4 crackers, 2 oz. of cheese, 1 chicken breast, large glass of juice, etc.

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
Milk, Yogurt, & Cheese 3-4 servings/day							
Meat, Poultry, Fish, Dry Beans, Egg, & Nuts 2-3 servings/day							
Fruits & Vegetables 5 or more servings/day							
Bread, Cereal, Rice, & Pasta 6-11 servings/day							
Fats, Oils, & Sweets Use sparingly							
Water 6-8 glasses							
Supplements							

